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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,398	07/29/2003	Kazutoshi Usui	116684	3978

25944 7590 02/09/2007
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EXAMINER

TRAN, NHAN T

ART UNIT	PAPER NUMBER
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2622

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/628,398	Applicant(s) USUI, KAZUTOSHI	
	Examiner Nhan T. Tran	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/4/2004 and 2/11/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on applications filed in JAPAN on 8/27/2002 & 9/27/2001. It is noted, however, that applicant has not filed certified copies of the JP 2002-246623 and JP 2001-297149 applications as required by 35 U.S.C. 119(b).

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 2/11/2004 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Specification

3. The disclosure is objected to because of the following informalities:

The disclosure recites, "switch16" in line 9 of page 10, line 12 of page 11 and line 20 of page 12. This should be corrected to read as -- switch 16 --.

Appropriate correction is required.

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the

description: "a CPU 102". Although the drawings show CPU 102a and CPU 102b in Fig. 2, the drawings do not show CPU 102.

It is noted that, except for CPU 102, reference numbers such as 101, 103, 104 and 105 described in specification to indicate the same reference numbers with suffices y and p for pitch and yaw directions (101p, 101y, 103p, 103y, 104p, 104y, 105p & 105y) are acceptable in view of description in specification, lines 1-5 of page 9.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Preliminary Amendments

5. Preliminary amendments filed 2/4/2204 are acknowledged and accepted.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1 & 3-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Washisu (US 6,704,501 B1).

Regarding claim 1, Washisu discloses a blur correction apparatus (col. 1, lines 5-10) comprising:

a blur correcting optical system (Fig. 19) constituting at least a part of a photographic optical system (a photographic lens of camera illustrated in Fig. 29), which corrects a blur occurring at an image-capturing surface (i.e., a film surface) of a photographing apparatus by moving within a movable range (moveable range pitch and yaw motors 1206 and 1210 in the structure shown in Fig. 19) extending along a direction (pitch and/or yaw direction) substantially perpendicular to an optical axis of the photographic optical system (see Fig. 19; col. 34, lines 12-67; col. 31, lines 27-28 and col. 32, lines 15-16);

a blur correction drive unit (Fig. 19, pitch and yaw motors 1206 and 1210) that drives the blur correcting optical system (col. 34, lines 27-34);

a blur correction operation enabling unit (Fig. 29, blur correction inhibiting switch 1704) that selects either a blur correction enabled state (e.g., blur correction is not inhibited when the switch 1704 is OFF) in which a blur correction operation executed by

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driving the blur correcting optical system is enabled (blur correction is operated) or a blur correction disabled state (e.g., blur correction is inhibited when the switch 1704 is ON) in which the blur correction operation is disabled (see col. 47, lines 30-45 and col. 34, lines 14-34);

a control unit (Fig. 28, camera microcomputer 1301) that controls the blur correction drive unit (motors 1206 and 1210) in the blur correction disabled state (inhibiting state in which blur correction is not needed) so as to hold the blur correcting optical system at a specific position (a center position) over a required length of time (the time length during the blur correction inhibiting switch 1704 is being pressed by the user) starting at a specific time point (a time point when the user presses the switch 1704 to command the microcomputer 1301 to inhibit blur correction operation). See col. 47, lines 30-45 and col. 34, lines 24-34.

Regarding claim 3, as disclosed by Washisu in col. 47, lines 30-45, the specific time point is a photographing operation start point (this is the time when the user decides to inhibit blur correction immediately right before starting of photographing operation by pressing the switch 1704).

Regarding claim 4, Washisu also anticipates that the specific time point is a time point at which the photographing apparatus is subjected to a shock. As clearly disclosed in col. 47, lines 30-45 that the user can intentionally takes a picture with hand vibration (drift photographing or the like). Thus, the user simply presses the switch

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1704 at the time of taking the picture during such a shock time to allow the camera to take a drift photograph with intentional blur.

Regarding claim 5, Washisu also anticipates that the time point at which the photographing apparatus is subjected to a shock is **at least** a time point at which power to the photographing apparatus is turned on. As seen in col. 47, lines 30-45, the user has an option to command the camera to disable (inhibit) the blur correction function by pressing the switch 1704 in real-time manner. The claim limitations are fully met when the camera is turned on during the time the camera subjected to a shock (i.e., the user is on a boat or on a running car, etc.) and the user decides to disable the blur correction at that time by simply pressing the switch 1704.

Regarding claim 6, Washisu discloses all limitations of claim 6 as discussed in claim 1 above. Washisu further discloses a control unit (camera microcomputer 1301) that controls the blur correction drive unit in the blur correction disabled state (inhibiting state in which blur correction is not needed) so as to move the blur correcting optical system to a position (the center position) at which the optical axis of the photographic optical system and an optical axis of the blur correcting optical system are substantially aligned with each other (both are aligned at the optical center position of the camera) at a start of a photographing operation and hold the blur correcting optical system at the position (see Figs. 19 & 29; col. 34, lines 20-27 and col. 47, lines 30-45).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 7, 8, 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Washisu (US 6,704,501 B1) in view of Eto et al. (US 7,113,204 B2).

Regarding claim 7, Washisu discloses a photographing apparatus (a video camera as described in col. 50, lines 8-16) comprising:

a blur correction apparatus according to claim 1 (see the analysis of claim 1 above);

an image capturing device that electronically captures an image obtained through the photographic optical system (see col. 50, lines 8-16 in which the camera is single lens reflex camera or a **video camera**. Thus, an image sensor for **electronically** capturing an image through the photographic optical system is inherent in the case where the camera is a video camera).

Since not all of video cameras have a recording processing unit and a recording medium but instead the recording processing unit and a recording medium may be located at a remote site, Washisu does not fairly disclose or suggest a recording processing unit that records the image captured by the image-capturing device into a recording medium.

In a reference to Eto et al. (hereafter referred as "Eto"), a video still camera (Fig. 1) having blur correction function (antivibration function 31) can capture an image and process to record the image into a recording medium (recording unit 203). See Eto, col. 10, lines 51-62.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Washisu and Eto to arrive at the Applicant's claimed invention by providing the camera with a recording processing unit and a recording medium for recording a captured image. Doing this would allow the user to conveniently record desired images into a recording medium of the camera for later reviewing or reproducing.

Regarding claim 8, Washisu in view of Eto discloses a display unit (i.e., display frame 1050 of optical viewfinder as shown in Figs. 14, 16A & 16B of Washisu) that displays the image obtained through the photographic optical system (see Washisu; Figs. 16A & 16B; col. 25, lines 26-30 and col. 27, lines 10-12 and note that this claim does not require the display being an electronic display and is therefore met by the optical display unit for displaying the image obtained through the photographic optical system).

Regarding claims 10-13, all limitations of claims 10-13 are also met by the analysis of claim 7 above.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1 & 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Maeno (US 5,084,724).

Regarding claim 1, Maeno discloses a blur correction apparatus (Fig. 9 and col. 1, lines 10-14) comprising:

a blur correcting optical system (lens 2 and support frame 3 shown in Fig. 9) constituting at least a part of a photographic optical system (photographic optical system of camera 1), which corrects a blur occurring at an image-capturing surface (a film surface or CCD image sensor; col. 9, lines 10-15) of a photographing apparatus (camera 1) by moving within a movable range (the moveable range within the limit of driving yokes, coils and flexible rods 4 as shown in Figs. 9 & 12) extending along a direction (X, Y direction) substantially perpendicular to an optical axis of the photographic optical system (see col. 9, line 30 – col. 10, line 45 and col. 11, lines 11-60);

a blur correction drive unit (yokes and coils 6-12) that drives the blur correcting optical system (Fig. 9, col. 10, lines 6-37);

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a blur correction operation enabling unit (release switch SW-1 shown in Figs. 1 & 6A) that selects either a blur correction enabled state (when the release switch SW-1 is ON) in which a blur correction operation executed by driving the blur correcting optical system is enabled or a blur correction disabled state (when the release switch SW-1 is OFF) in which the blur correction operation is disabled (see Figs. 1 & 6A; col. 21, lines 44-56 and col. 22, lines 31-43, wherein the camera shake compensation is enabled only when the switch SW-1 is ON so as to allow power supply to the camera vibration detection circuit 18 and camera vibration compensation circuit 20 shown in Fig. 6A; otherwise, the camera vibration detection circuit 18 and camera vibration compensation circuit 20 is disabled by cutting the power supply to those circuits when the switch SW-1 is OFF);

a control unit (camera vibration compensation circuit 20, 21 shown in Fig. 14) that controls (cutting current supply to the coils) the blur correction drive unit in the blur correction disabled state (the switch SW-1 is OFF) so as to hold the blur correcting optical system at a specific position over a required length of time (as long as the switch SW-1 is OFF) starting at a specific time point (the time when switch SW-1 is OFF). See Figs. 9, 10 & 13 and col. 9, lines 43 – col. 10, line 37 and col. 11, lines 11-60. It is noted that the support frame 3 of lens 2 is held back to a neutral position by the deflecting force of flexible rods 4 when vibration compensation is disabled by cutting electric current supply to the coils.

Regarding claim 2, Maeno discloses that the blur correcting optical system **can freely move** within the moveable range in the blur correction disable state. It is clearly seen in Fig. 12, col. 9, lines 43-66 and the analysis of claim 1 that when the camera is subject to a shock (i.e., the camera is dropped) during the time the vibration compensation is disabled, the support frame 3 of lens 2 can freely move within the moveable range by elastically deflecting force of rods 4 because at that time no electric current is applied to the coils to electrically hold the support frame 3 of lens 2.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maeno (US 5,084,724) in view of Eto et al. (US 7,113,204 B2).

Regarding claim 9, Maeno discloses a photographing apparatus (an electronic still camera, Fig. 9 and col. 9, lines 11-15) comprising:

a blur correction apparatus according to claim 2 (see the analysis of claim 2);
an image-capturing device (CCD image sensor) that electronically captures an image obtained through the photographic optical system (col. 9, lines 11-15);

Since not all of electronic still cameras have a recording processing unit and a recording medium but instead the recording processing unit and a recording medium may be located at a remote site, Maeno does not fairly disclose or suggest a recording processing unit that records the image captured by the image-capturing device into a recording medium.

In a reference to Eto, a video still camera (Fig. 1) having blur correction function (antivibration function 31) can capture a still image and process to record the image into a recording medium (recording unit 203). See Eto, col. 10, lines 51-62.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Maeno and Eto to arrive at the Applicant's claimed invention by providing the camera with a recording processing unit and a recording medium for recording a captured image. Doing this would allow the user to conveniently record desired images into a recording medium of the camera for later reviewing or reproducing.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kanbara (US 5,973,856) discloses an imaging apparatus in which blur correction is inhibited when executing correction of image plane shift such as focusing operation.

Nishiwaki (US 6,900,831 B2) discloses optically blur correction of an image is executed only when recording an object image. Otherwise, the correction is not executed.

Okada et al. (US 5,897,226) discloses an image blur prevention apparatus with locking device.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Tran whose telephone number is (571) 272-7371. The examiner can normally be reached on Monday - Friday, 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



NHAN T. TRAN
Patent Examiner